Structure of Fibrous Biopolymers. Colston Papers No. 26

Edited by E.D.T. Atkins and A. Keller
Butterworths; London, 1975
437 pages. £ 16.00

This book contains the proceedings of the Twenty-Sixth Symposium of The Colston Research Society of Bristol, held on 2–4 April 1974. The title is misleading, since the symposium was mainly concerned with the structure and function of collagen and mucopolysaccharides, though about one-third of the papers dealt with plant cell-wall polysaccharides, insect cuticle, starch, keratin and model polypeptides. There is nothing on, for example, nucleic acids, nucleoproteins, or muscle.

The standard of the individual contributions is variable, some are very short and presumably relied largely on slides that are not reproduced in the book. The editing is also somewhat variable, units vary through the book and even within a single paper. There is no subject or author index although quite a number of pages are devoted to, sometimes banal, discussion points and acknowledgements and thanks to the speakers and other.

The book opens with an excellent account of the life and times of W. T. Astbury, the father of structural studies of biopolymers, by his one-time colleague R. D. Preston. There is insufficient space to discuss all the other contributions so only those that particularly interested the reviewer will be mentioned. Atkins on the X-ray study of connective tissue polysaccharides, Phelps on the intercellular matrix and Mackie on plant cell-wall polysaccharides are all interesting. The papers on collagen and collagenous substances by Bailey, Miller, Walton, Keller, Baer and their colleagues provide an excellent account of the state of knowledge in 1974.

The books is well produced, the figures are good and there is a pleasing lack of typographical errors. It will be a useful reference volume on the field it covers, though an index would have helped greatly.

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Chemical Modifications of Proteins

by A. N. Glazer, R. J. Delange and D. S. Sigman
North-Holland Publishing Company; Amsterdam, New York, 1975
iv + 205 pages. Dfl. 28.00, $ 11.75 (paper)

Studies of their chemical reactions have led to major advances in understanding proteins, the most versatile of biological molecules. This book provides a background for any potential protein chemist searching for a method or reagent suitable for his particular needs. In common with other members of this series, it emphasises experimental techniques. In some cases, methods are described in such detail that an experiment may be performed without recourse to the original literature. However, because of the diverse nature of proteins, adaptation of published methods is often required to yields a successful modification.

One section describes methods of amino acid analysis that resolve derivatives which are likely to be formed by common modifying reagents. In addition, it is occasionally necessary to detect and measure